

The State of New Hampshire

Department of Environmental Services



Michael P. Nolin Commissioner

> February 24, 2004 **Letter of Deficiency** DSP#04-013

NH Audubon Society 3 Silk Farm Road Concord, NH 03302

RE: Willard Pond Dam #009.19, Antrim

Dear Mr. Milligan:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 16, 2003. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. There is a sinkhole located 12 paces to the left of the spillway. The sinkhole is approximately 12"x 8"x 4" deep. There is also seepage located at the toe of the dam in alignment with the sinkhole;
- 2. The entire left and right embankments are in need of annual mowing. Areas requiring mowing are the upstream embankment, embankment crest, and for a distance of 10 feet from the downstream toe of the dam;
- 3. There were turtle burrows on the left upstream embankment;
- 4. At the time of the inspection there was approximately 3 inches of flow over the spillway preventing an inspection of the downstream channel for the presence of a scour hole at the downstream toe of the spillway; and
- 5. The operation and maintenance plan on file is dated 1997. This plan should be reviewed and updated as necessary.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

July 1, 2004:

- 1. Fill the sinkhole located approximately 12 paces to the right of the spillway. This area should be monitored for future sinkholes as well as the seepage should be monitored for sediment transport;
- 2. Annual mowing of the embankments should be conducted including the upstream embankment, embankment crest, and for a distance of 10 feet from the downstream toe of the dam;
- 3. Repair any embankment damage caused by turtle burrows;

Letter of Deficiency Dam#009.19/DSP#04-013 February 24, 2004 pg. 2

- 4. During low flow conditions, inspect the toe of the spillway looking for the evidence of stream channel erosion (i.e. scour hole) and repair if necessary; and
- 5. Review and update the existing 1997 O&M plan.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the cover page.

Sincerely,

Jeffrey M. Blaney, P.E Dam Safety Engineer

Attachments Copy of 1997 O&M, DB13

cc: Gretchen Rule Town of Antrim

Certified #<u>7000 /670 000 0</u>585 9657

JMB/was/h:/safety/wendy/lod/009-19lod.doc